# FREQUENT USERS OF AMBULATORY HEALTH CARE IN QUEBEC: THE CASE OF DOCTOR-SHOPPERS

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## Abstract • Résumé

**Objective:** To examine the patterns of use of ambulatory care in Quebec in 1991, with special emphasis on patients who received care from more than 20 physicians.

**Design:** Retrospective study of population-based data.

**Setting:** Province of Quebec.

**Participants:** All 7 154 591 people eligible for coverage under the Régie de l'assurance-maladie du Québec (RAMQ) (Quebec Health Insurance Plan) in 1991, including 3639 people who received ambulatory care from more than 20 physicians.

**Data extraction:** The databanks of the RAMQ.

**Outcome measures:** Mean number (and standard deviation) of physician visits and services received, place of visit (clinic or private office), mean cost of services, patient's age, diagnosis, type of specialist visited and social assistance status of frequent users.

**Results:** The patients who obtained ambulatory care from more than 20 physicians received 10 times more medical services than the overall patient population (59.6 v. 5.8), and the mean cost per patient for ambulatory care was also 10 times higher ($1379 v. $136). Almost all of the frequent users visited at least one outpatient clinic, as compared with 37.3% of the overall population. A higher proportion of the frequent users than of the overall population obtained care from specialists (98.9% v. 54.7%), mainly general surgeons and psychiatrists. The most frequent diagnoses among the frequent users were anxiety (36.0%), abdominal pain (24.3%), drug or alcohol dependence (22.2%) and depression (16.4%).

**Conclusions:** A small proportion of the population obtained ambulatory care from a high number of physicians during the year, leading to high expenses. Identifying and understanding this type of frequent user may be useful in developing strategies to promote more effective health-care-seeking behaviours and reduce overuse.

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**Objectif :** Examiner les tendances de l'utilisation des soins ambulatoires au Québec en 1991 et mettre particulièrement l'accent sur les patients qui ont reçu des soins de plus de 20 médecins.

**Conception :** Étude rétrospective de données populationnelles.

**Contexte :** Province de Québec.

**Participants :** Les 7 154 591 personnes admissibles à la Régie de l'assurance-maladie du Québec (RAMQ) en 1991, y compris 3 639 personnes qui ont reçu des soins ambulatoires de plus de 20 médecins.

**Extraction des données :** Les banques de données de la RAMQ.

**Mesures des résultats :** Nombre moyen (et écart-type) de consultations de médecins et services reçus, lieu de la consultation (clinique externe d'hôpital ou cabinet privé), coût moyen des services, âge du patient, diagnostic, type de spécialiste consulté et statut des utilisateurs fréquents face à l'aide sociale.

**Résultats :** Les patients qui ont obtenu des soins ambulatoires de plus de 20 médecins ont reçu 10 fois plus de services médicaux que l'ensemble des participants (59,6 c. 5,8) et le coût moyen des soins ambulatoires par patient a été lui aussi 10 fois plus élevé (1 379 $ c. 136 $). Presque tous les utilisateurs fréquents se sont rendus à au moins une clinique externe, comparativement à 37,3 % chez l'ensemble des participants. Un pourcentage plus élevé de patients chez les utilisateurs fréquents que dans l'ensemble des participants a obtenu des soins de spécialistes (98,9 % c. 54,7 %), et surtout de chirurgiens généraux et de psychiatres.


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Les diagnostics le plus souvent posés chez les utilisateurs fréquents ont été l'anxiété (36,0 %), les douleurs abdominales (24,3 %), la toxicomanie ou l'alcoolisme (22,2 %) et la dépression (16,4 %).

**Conclusions :** Un faible pourcentage de la population a obtenu des soins ambulatoires d'un nombre élevé de médecins au cours de l'année, ce qui a entraîné des dépenses élevées. Une meilleure connaissance du comportement de ce type d'usagers pourrait fournir des informations utiles à l'élaboration de stratégies visant à assurer une utilisation plus rationnelle des soins de santé et à réduire l'utilisation excessive.

In Quebec the cost of physician services more than doubled between 1981 and 1991, from $818 million to $1841 million. Physician services accounted for about 15% of public health care expenditures, second only to the costs of institutional care.[1,2] In Quebec, as in the rest of Canada, patients are free to choose their doctor, and there is generally no limit to the number of physicians patients may visit. The absence of limits on use under a universal public health insurance program that has no deductible or copayment has led to concern that physicians' services are being overused.[3] Overuse may be tracked down among high-cost users, among patients with many ambulatory visits over time or among patients who seek care from a wide variety of sources (physicians or clinics). This last type of frequent use, also described as "doctor-shopping," can lead to duplication of services and to high costs owing to the patient's changing physicians without apparent motive. Moreover, the physicians consulted often come from different clinical settings.

Studies of high-cost users of medical care have shown the importance of health status as the main predictor of costs but have not shed much light on the overuse phenomenon.[4,5] The use of health care services by elderly people, who account for a large portion of medical expenditures, has also been studied extensively.[6–10] A few studies have specifically examined frequent users of ambulatory care, which is more likely than any other type of care to be initiated by the patient. Frequent users of ambulatory care were found to be characterized by a high level of psychologic distress (mainly anxiety and depression), somatic symptoms and hypochondria.[11–16] Chronic conditions were common.[14,16] Sociodemographic characteristics were not found to be associated with frequent use.[14] Although frequent users scored poorly on mental health scales, their mental health contacts represented only a small fraction of their medical visits.[14] It was also found that patients with psychiatric problems made twice as many general medical visits as people who did not seek mental care.[15]

These studies described the characteristics of frequent users of ambulatory care but did not take into account the multiplicity of care sources. Few reported on "doctor-shopping behaviour."[17]

Given the high costs of ambulatory care, which accounted for half the amount paid to physicians remunerated on a fee-for-service basis in Quebec in 1991 ($800 million),[2] it is important to document the characteristics of frequent users of ambulatory care who visit a large number of physicians. In addition to being costly, their health-care-seeking behaviour may be ineffective. This information may provide background material useful for defining cost-containment measures. It is also of interest to physicians, who are often frustrated in their attempts to help these patients, and may form the basis of new programs to find more effective ways to help them.

The aim of this study was to describe the patterns of use of ambulatory care in Quebec in 1991, with emphasis on frequent users who received care from many physicians.

## Methods

The Régie de l'assurance-maladie du Québec (RAMQ) (Quebec Health Insurance Plan) pays for all physician services in the province. Physician services considered were those rendered by physicians paid on a fee-for-service basis. This mode of payment accounted for 87.5% of the costs for physician services in 1991.[2] No information is available for individual patients of salaried physicians or of those receiving sessional fees.

The data used were collected from the claim files of the RAMQ. Each service provided is individually computerized to facilitate payment to the provider. It is therefore possible to identify the age and sex of the patient, how many services were delivered to that patient, the nature of the services, the fee paid to the physician, the date of delivery and the patient's main complaint at each visit. One complaint is recorded per visit; it consists of a four-digit ICD-9[18] diagnosis code. No reliability check has been made to verify the accuracy of the diagnosis. A visit may include one or several services, depending on how many examinations are performed during the visit. Social assistance status is also included in the databanks of the RAMQ because some programs are designed for social assistance recipients only. This information is provided by the Ministère de la main-d'oeuvre et de la sécurité du revenu and is linked to data on use of services through the patient's health insurance number. All this information is routinely stored in the databanks of the RAMQ. The data are believed to reflect accurately and reliably services rendered by physicians since underreporting of services is not in the providers' interest and overreporting is limited by the monitoring of in-

dividual practice profiles and other control measures.

The services included in the study were all examinations, consultations and psychiatric treatments rendered by general practitioners and specialists in private practices, outpatient clinics and emergency units in Quebec. Thus, medical procedures (diagnostic, therapeutic and surgical procedures and anesthesia) performed by physicians were not considered. Hospital services, such as nursing care, ancillary services, laboratory services and any other service included in the global budget of hospitals, were also excluded. Out-of-province use is small in Quebec (less than 1% of expenditures) and was not considered in this study.

The average pattern of use of ambulatory care was determined for the entire population of the province. In 1991, 7 154 591 people were eligible for the health insurance plan, of whom 5 842 471 made at least one visit to a physician for ambulatory care during the year. Analyses involved the complete dataset available for the entire population rather than a representative sample. Such extensive calculations were possible because of the exhaustiveness of the information in the administrative databanks.

Frequent users were defined as people who received ambulatory care from more than 20 physicians in 1991. This number was established after the distribution of all beneficiaries of the health insurance plan was examined according to the number of physicians visited for ambulatory care during the year. With this cutoff, only the most extreme cases of doctor-shopping were retained, and patients whose health-care-seeking behaviour could be easily explained by their health status were excluded. A total of 3672 patients meeting the definition of frequent user were identified, of whom 33 with incomplete information on one type of service were excluded. The frequent-user group thus comprised 3639 patients.

The patterns of use of the frequent users were compared with those of all patients who received ambulatory care (including the frequent users). This exploratory study used descriptive statistics: participation rate, mean and standard deviation. Diagnoses and use patterns were then examined in more detail among the frequent users. Analyses were carried out with the use of SAS software (version 6.07; SAS Institute Inc., Cary, NC). Costs are expressed in 1991 Canadian dollars.

## Results

### Use of ambulatory services

Table 1 shows the overall distribution of all patients who received ambulatory care from physicians in Quebec in 1991. Over half of all patients saw one or two physicians, and 80% saw fewer than five. Over 10% of patients saw between 6 and 10 physicians, and 0.06% of patients (the frequent users) saw more than 20 different physicians.

The average number of physicians visited, number of services and cost of services for the frequent users and for all patients, including the frequent users, are shown in Table 2. The 3639 frequent users received a total of 216 986 ambulatory services in 1991, for a total cost of $5 million. They constituted 0.05% of the Quebec population, but they accounted for approximately 0.6% of expenditures for

**Table 1: Distribution of patients in Quebec who obtained ambulatory care in 1991 according to the number of physicians visited**

| No. of physicians visited | No. (and %) of patients |
|---|---|
| 1 | 1 746 619 (29.9) |
| 2 | 1 359 994 (23.3) |
| 3 | 962 500 (16.5) |
| 4 | 639 359 (10.9) |
| 5 | 411 859 (7.0) |
| 6–10 | 638 108 (10.9) |
| 11–15 | 69 896 (1.2) |
| 16–20 | 10 464 (0.2) |
| ≥ 21 | 3 672 (< 0.1) |
| Total | 5 842 471 (100.0) |

**Table 2: Average number of physicians visited, number of ambulatory services obtained and cost of services* for frequent users and for all patients**

| Variable | Mean (and standard deviation [SD]) Frequent users *n = 3 639* | All patients *n = 5 842 471* |
|---|---|---|
| No. of physicians visited | 26.8 (9.8) | 3.0 (0.8) |
| No. of general practitioners (GPs) visited | 18.3 (9.9) | 2.0 (0.9) |
| No. of specialists visited | 8.5 (5.0) | 1.0 (1.3) |
| No. of specialties seen | 5.1 (2.8) | 0.9 (1.2) |
| No. of ambulatory services obtained | 59.6 (29.1) | 5.8 (1.1) |
| No. of visits to GPs | 30.5 (18.5) | 3.6 (1.1) |
| No. of visits to specialists | 16.1 (12.6) | 1.9 (1.9) |
| Cost of ambulatory services, $ | 1379 (716) | 136 (2) |
| Cost of all physician services, $ | 2568 (1658) | 263 (3) |

*Costs are expressed in 1991 Canadian dollars.

ambulatory services. On average, each frequent user received 59.6 ambulatory services from 26.8 physicians (an average of 2.2 services per physician visited), for a mean cost of $1379. In the overall population each patient received 5.8 ambulatory services from 3.0 physicians on average, for a mean cost of $136. Although the cost of ambulatory services differed greatly between the two groups, ambulatory care accounted for a similar share of the average total cost of physician services provided to each group (53.7% for the frequent users and 51.7% for all patients).

There were striking differences between the frequent-user group and the overall patient population in the various sources of ambulatory care (Table 3). Almost all the frequent users visited at least one outpatient clinic, as compared with 37.3% of the overall population, and more than one third visited over three clinics. A higher proportion of the frequent users than of the overall population obtained care from specialists (98.9% v. 54.7%). On average, 5.1 specialties were seen per frequent user. General surgeons and psychiatrists were consulted most often by the frequent users (47.4% and 40.3% respectively of patients) (Table 4); these two specialties also accounted for the highest numbers of visits (8.5% and 18.9% respectively of all visits to a specialist). More than 95% of the frequent users had at least one referral to another physician during the year; their mean number of referrals was 5.3. In addition to the high proportion of frequent users seeing a psychiatrist, almost half of this group received counselling from general practitioners.

### Sociodemographic and diagnostic characteristics of frequent users

The frequent-user group included 1528 male and 2111 female patients. Children aged 14 years or less were underrepresented (2.9% of the frequent users v. 19.7% of the Quebec population). When children were excluded (as theoretically they do not seek their own health care) the age distribution of the frequent users was similar to that of the Quebec population except for those aged 65 years or more, who were overrepresented (18.0% of the frequent users v. 13.6% of the Quebec population). A total of 40% of the frequent users were social assistance recipients. The patterns of use of ambulatory services were similar for the two sexes.

An average of 16.8 different diagnoses were reported for each frequent user during the year. Although the conditions diagnosed may have been closely related, the high number of different specialties seen per user suggests the presence of several diseases. Drug or alcohol dependence was diagnosed at least once during the year for 22.2% of the patients. The number of services obtained, the number of different diagnoses and the prevalence of drug or alcohol dependence increased with the number of physicians visited during the year (Table 5).

For each frequent user the five most common diagnoses reported during the year were examined. High prevalence rates of anxiety (36.0%), depression (16.4%) and somatic symptoms, such as abdominal pain (24.3%), chest pain (11.5%), migraine or headache (10.4%), lumbago (5.9%) and insomnia (4.1%), were found. Respiratory disorders were also frequent (11.3% for asthma and 6.8% for upper respiratory tract infection). The other most common diagnoses were diabetes mellitus (7.2%), angina pectoris (6.2%) and multiple wounds (5.0%). When all diagnostic categories were considered, 82.2% of the frequent users had at least one diagnosis related to psychiatric disorders or ill-defined symptoms.

## Discussion

In 1991 the average patient in Quebec received ambulatory care from three physicians, for a mean cost of

**Table 3: Sources of ambulatory care for the frequent users and for all patients**

| Source or type of care | No. (and %) of patients | |
|---|---|---|
| | Frequent users | All patients |
| GPs only | 41 (1.1) | 2 645 409 (45.3) |
| Specialists | 3 598 (98.9) | 3 196 588 (54.7) |
| Psychiatrist | 1 466 (40.3) | 118 970 (2.0) |
| Counselling therapy from GPs | 1 779 (48.9) | 394 436 (6.8) |
| At least one referral | 3 483 (95.7) | 1 596 456 (27.3) |
| Private offices only | 38 (1.0) | 3 129 675 (53.6) |
| Outpatient clinics only | 95 (2.6) | 533 263 (9.1) |
| Private offices and outpatient clinics | 3 506 (96.4) | 2 179 059 (37.3) |

**Table 4: The 10 specialties seen most often by the frequent users**

| Specialty | No. (and %) of patients |
|---|---|
| General surgery | 1724 (47.4) |
| Psychiatry | 1466 (40.3) |
| Gastroenterology | 1238 (34.0) |
| Otolaryngology | 1187 (32.6) |
| Internal medicine | 1142 (31.4) |
| Orthopedic surgery | 1060 (29.1) |
| Neurology | 1049 (28.8) |
| Obstetrics/gynecology | 1012 (27.8) |
| Cardiology | 1002 (27.5) |
| Dermatology | 861 (23.7) |

$136. Less than 1% of patients visited more than 20 physicians for ambulatory care; a frequent user saw on average 27 physicians, for a mean cost of $1379. Compared with the overall patient population, frequent users of ambulatory services were characterized by extensive use of outpatient clinics and services from specialists and by a high level of mental health contacts (visits to psychiatrists and counselling from general practitioners). The diagnoses most commonly reported in this group were psychologic problems, vague somatic complaints, chronic conditions, and drug or alcohol dependence.

Similar diagnostic characteristics were found among frequent users in other studies.[11–16] My findings confirm that frequent users are more likely to have psychologic problems, have a higher prevalence of physical problems and use general medical services more frequently than the general population.[13–15] The large number of visits to surgeons by frequent users of ambulatory care noted in the present study has been observed elsewhere.[14] Almost half of the frequent users visited at least three outpatient clinics or private offices in at least three municipalities. Among these patients those with a diagnosis of drug or alcohol dependence were overrepresented. The use of several care settings may suggest a desire to remain anonymous.

What is distinct about this study is the emphasis on doctor-shoppers rather than on frequent users as a whole. Frequent users of ambulatory health care do not necessarily seek care from many sources. Doctor-shoppers share similar characteristics with other types of frequent user, but the high proportion of patients with a diagnosis of drug or alcohol dependence and the high proportion of social assistance recipients are specific to them.

The present study has several limitations. First, although the number of services rendered by fee-for-service physicians is likely extremely accurate, the actual diagnoses may be less so. This is because patients may have several diagnoses, but only one is reported on the physician's claim, and the diagnoses could not be verified. Nevertheless, these diagnoses provide a good indication of the type of problems shown by the patient, particularly when cross-validated with the type of specialist visited or the type of service provided. Thus, the high number of mental health contacts in this study corroborates the high prevalence of psychologic problems among the frequent users. It has been found that the reliability of diagnostic data increases when a less specific diagnosis is considered.[19]

Second, from administrative databanks we cannot determine the appropriateness of care. In some cases the high number of physicians seen by a patient may result from the presence of many health care providers in the same setting, where problems requiring immediate care or follow-up visits can be dealt with by any available physician. This can also be the case for unplanned visits to a doctor, such as at a walk-in clinic. In such cases and for chronic conditions requiring periodic monitoring or treatment (e.g., diabetes and asthma) the number of physicians visited during the course of a year can reach a high but appropriate level.

Third, it was not possible to determine the proportion of visits initiated by the patient. An indirect indicator was the mean number of referrals per user. The low level of referrals compared with the number of physicians seen and the number of visits suggest that patient-initiated visits predominated. The large number of general practitioners seen per user also suggests the preponderance of patient-initiated visits.

Finally, the information was limited to physicians remunerated on a fee-for-service basis. For services provided by salaried physicians and those receiving sessional fees (which accounted for 12.5% of costs of physician services in 1991) the patients could not be identified. These services are provided mainly in hospital. Their omission slightly underestimates the use of ambulatory care, specifically psychiatric services. The results presented here should be taken as a conservative estimate of the doctor-shopping phenomenon.

**Table 5: Mean number of ambulatory services and diagnoses among the frequent users according to the number of physicians visited**

| No. of physicians visited | No. of patients | Mean no. of services rendered per patient per year (and SD) | Mean no. of diagnoses per patient per year (and SD) | Prevalence of drug or alcohol dependence, % |
|---|---|---|---|---|
| 21–25 | 2272 | 49.8 (17.7) | 15.0 (5.1) | 15.9 |
| 26–30 | 732 | 62.8 (21.6) | 17.5 (5.8) | 25.1 |
| 31–35 | 279 | 73.5 (23.0) | 20.2 (6.4) | 38.0 |
| 36–40 | 136 | 85.5 (30.4) | 21.1 (6.5) | 34.6 |
| 41–45 | 86 | 94.3 (26.9) | 22.7 (7.1) | 44.2 |
| 46–50 | 43 | 103.6 (29.7) | 23.7 (8.1) | 53.5 |
| ≥ 51 | 91 | 144.8 (69.6) | 29.8 (12.4) | 53.9 |

The high prevalence of psychologic problems and of somatic complaints is a striking characteristic of frequent users of ambulatory health care. According to McFarland and colleagues[14] frequent use may result from failure to develop adequate strategies for dealing with the emotional component of disease. As suggested by these authors, more attention should be given to the emotional component of disease in treatment approaches.

Doctor-shopping also raises questions about the quality of the doctor–patient relationship. The absence of a stable relationship between a patient and a doctor may be a symptom of dissatisfaction with health care delivery as well as a result of the organization of the health care system. There is also a possibility that some patients deliberately change physicians to get services they would not receive otherwise, such as unnecessary prescriptions. This behaviour probably leads to duplication of services and to higher costs. In a perspective of efficiency and cost-containment, efforts should be made to study how continuity of care could be established to better address the needs of these patients. Until more is known about why some patients go from one physician to another, not much can be done to help them.

Three provinces (British Columbia, Manitoba and Nova Scotia) have implemented measures to reduce the use of medical services among frequent users.[20–22] Frequent users were asked to sign an agreement to limit their use of medical services to one primary care physician, and doctors were provided with a list of the health insurance numbers of restricted clients. Decisions about measures to reduce overuse have not yet been reached in Quebec, but before a program is implemented it would be helpful to know more about doctor-shopping practices. The implications would be different if most visits were found to be patient-initiated rather than physician-initiated. The diagnostic profile should also be taken into account. Physicians have a role to play in devising strategies to increase effective use of health care services and improve quality of care.

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## References

1. *Statistiques annuelles 1981*, Régie de l'assurance-maladie du Québec, Quebec, 1982: 103
2. *Statistiques annuelles 1991*, Régie de l'assurance-maladie du Québec, Quebec, 1992: 111
3. Bell NR, Szafran O: Use of walk-in clinics by family practice patients. *Can Fam Physician* 1992; 38: 507–513
4. Garfinkel SA, Riley GF, Iannacchione VG: High-cost users of medical care. *Health Care Financ Rev* 1988; 9 (4): 41–52
5. Zook CJ, Moore FD: High-cost users of medical care. *N Engl J Med* 1980; 302: 996–1002
6. Barer ML, Evans RG, Hertzman C et al: Aging and health care utilization: new evidence on old fallacies. *Soc Sci Med* 1987; 24: 851–862
7. Barer ML, Pulcins IR, Evans RG et al: Trends in use of medical services by the elderly in British Columbia. *Can Med Assoc J* 1989; 141: 39–45
8. Freeborn DK, Pope CR, Mullooly JP et al: Consistently high users of medical care among the elderly. *Med Care* 1990; 28: 527–540
9. Roos NP, Shapiro E, Roos LL: Aging and the demand for health services: Which aged and whose demand? *Gerontologist* 1984; 24: 31–36
10. Roos NP, Shapiro E, Tate R: Does a small minority of elderly account for a majority of health care expenditures? A sixteen-year perspective. *Milbank Q* 1989; 67: 347–369
11. Andersen R, Francis A, Lion J et al: Psychologically related illness and health services utilization. *Med Care* 1977; 15: 59–73
12. Barsky AJ, Wyshak G, Klerman GL: Medical and psychiatric determinants of outpatient medical utilization. *Med Care* 1986; 24: 548–560
13. Manning WG, Wells KB: The effects of psychological distress and psychological well-being on use of medical services. *Med Care* 1992; 30: 542–553
14. McFarland BH, Freeborn DK, Mullooly JP et al: Utilization patterns among long-term enrollees in a prepaid group practice health maintenance organization. *Med Care* 1985; 23: 1221–1233
15. Mechanic D, Cleary PD, Greenfey JR: Distress syndrome illness behavior, access to care and medical utilization in a defined population. *Med Care* 1982; 20: 361–372
16. Tessler R, Mechanic D, Dimond M: The effect of psychological distress on physician utilization: a prospective study. *J Health Soc Behav* 1976; 17: 353–364
17. Kasteler J, Kane RL, Olsen DM: Issues underlying prevalence of "doctor-shopping" behavior. *J Health Soc Behav* 1976; 17: 328–339
18. *International Classification of Diseases*, 9th rev, World Health Organization, Geneva, 1978
19. Potvin L, Champagne F: *L'usage de fichiers administratifs pour la recherche en santé* (Groupe de recherche interdisciplinaire en santé [GRIS] publ no 85-03), Faculté de médecine, Université de Montréal, Montreal, 1985
20. Moulton D: N.S. program to limit patients to one doctor. *Med Post* 1994; Nov 8: 1, 68
21. Quinn M: Manitoba limits health-care access for "high user" patients. *Fam Pract* 1994; 6 (18): 2
22. *Medical Services Plan's Bulletin*, BC Ministry of Health and BC Ministry Responsible for Seniors, Victoria, Oct 1992



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